IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellants:	Tremlett et al.	Atty Docket:	00-8022
Serial No.:	10/003,394	Art Unit:	2157
Filed:	October 23, 2001	Examiner:	Sall, El Hadji Malick
Title:	APPLICATION SERVER DOMAINS		

APPEAL BRIEF

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is an Appeal Brief under Rule 41.37 appealing the final decision of the Examiner

dated December 30, 2005. Each of the topics required by Rule 41.37 is presented herewith and

labeled in accordance therewith. Only one copy of this Appeal Brief is required, in accordance

with MPEP §1205.02.

TABLE OF CONTENTS

I. REAL PARTY IN INTEREST

The real party in interest is Verizon Corporate Services Group Inc., a corporation organized and existing under the laws of the state of New York, and having had a principal place of business address at 1095 Avenue of the Americas, New York City, New York 10036. Verizon recently moved its headquarters to One Verizon Way, Basking Ridge, New Jersey 09720.

II. RELATED APPEALS AND INTERFERENCES

There are no appeals or interferences related to the present application of which the

Appellants are aware

III. STATUS OF CLAIMS

Claims 1-31 are currently pending in the application and all stand finally rejected, the date of the final Office Action being December 30, 2005. Appellants appeal from the final rejection of claims 1-31 which are presented in the Claims Appendix.

IV: STATUS OF AMENDMENTS

Subsequent to the final Office Action of December 30, 2005, (hereinafter "final Office Action"), Appellants filed an after-final response on February 27, 2006. In that response Appellants did not amend, add or cancel any claims. Accordingly, there are no outstanding after-final amendments to the claims, and claims 1-31, as shown in the Claims Appendix, stand rejected for purposes of this appeal.

In addition, Appellants have received an Advisory Action dated March 20, 2006, filed a Pre Appeal Brief Request for Review on April 4, 2006 and received a Notice of Panel Decision from Pre Appeal Brief Review dated July 7, 2006 resulting in the instant Appeal Brief.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Appellants' claims relate to at least computer program product, methodology and an application server which utilize <u>domain policy</u> to enhance the handling of a telephone call at the application server which is connected outside of a public switched telephone network (PSTN). The application can be segmented into various "domains" or categories each having an associated <u>domain policy</u>. The domains can include, for example, telephone subscriber (customer) domains, service domains, device domains, etc.

With reference to Fig. 3, application server 200 is segmented into different domains (not shown), each domain representing, for example, an aggregation of subscribers (telephone customers). For example, one such domain may correspond to Verizon customers and another such domain may correspond to Sprint customers. Associated with each such domain is a domain manager and in this example Domain Manager 208 (Subscriber Domain Manager #1) could correspond to only Verizon customers while Domain Manager 206 (Subscriber Domain Manager #2) could correspond to only Sprint customers.

A domain mapper 210 identifies each telephone call arriving via Internet 100 as involving a subscriber belonging to one of the two domains given in this example, and is provided to map the Sprint/Verizon calls to their respective domains. Domain managers 208 and 206 can each then apply its respective one of the aforementioned <u>domain policies</u> to telephone calls that are so mapped. These policies can be equal, or different, in different domains, and in this example can restrict customer access to different services (such as voice mail, call forwarding, caller ID, etc.).

For example, domain managers 206 and 208 may both implement <u>domain policies</u> that deny access to a service 204 (e.g., voice mail, or call forwarding, etc.) under certain conditions. This denial of access to a service for a customer could be for any of a number of reasons

7

including, of course, late payment or non-payment of charges by customers who have used the services but have not yet paid their bills. Both domain managers could implement the same domain policy or one domain manager may implement such a domain policy while the other domain manager does not. Indeed, one domain manager could restrict only call forwarding to its late-paying customers while the other domain manager could restrict only voice mail to its late-paying customers. Or, the different domain policies could impose different restrictions based on degree of lateness of payment - if a "little late" perhaps the domain policy associated with one domain manager would restrict only voice mail, but if "very late" then perhaps both voice mail and call forwarding would be restricted while the other domain manager, for example, could impose the same restrictions in reverse, or for different lateness measurements, or need not impose the restrictions at all.

Appellants, by way of this summary, are attempting to illustrate the wide flexibility available by virtue of application of domain policy - domains can be widely defined, and activity within a domain can be controlled in a particular fashion and that control can vary from domain to domain. [*This has nothing to do with a routing policy governing the routing of information to a particular router based on a domain name.*]

Accordingly, Appellants' claims generally focus on the handling, at an application server, of a telephone call made by a customer-subscriber, by receiving information corresponding to the call, the information including data identifying calling services offered by the application server and to which the customer has subscribed, and based on that information selecting a domain policy which applies to a set of subscribers - the handling of that telephone call being in accord with the selected domain policy.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

In the final Office Action, the following rejections were made:

Claims 1-31 are finally rejected under 35 U.S.C. §103(a) as being un-patentable over U.S. Patent 6,853,714 to Liljestrand et al. (hereinafter "Lil") in view of U.S. Patent 6,789,118 to Rao (hereinafter "Rao"). These are the sole grounds of rejection to be reviewed on appeal.

VII: ARGUMENT

The Lil Reference:

Lil discloses an apparatus and method for providing enhanced telecommunication services. (title) It provides these services by implementing an enhanced services platform on a local network exchange within the public switched telephone network (PSTN). A plurality of enhanced telephone communications services can be provided to a subscriber by using a voice activated interface or a web-activated interface, enabling the subscriber to access at least one of these services. (Abstract and Summary) In Appellants' view, Lil describes operation consistent with layer 6 (presentation layer) and layer 7 (application layer) of the ISO (International Standards Organization) OSI (Open Systems Interconnection) networking protocol hierarchy.

The Rao Reference:

Rao discloses a multi-service network switch with policy based routing. (title) The switch is capable of providing multiple network services from a single platform. The switch incorporates a distributed packet forwarding architecture where each of its various cards is capable of making independent forwarding decisions. The switch supports <u>policy based routing</u> where specific <u>routing paths</u> are selected based on criteria such as a telephone number or a domain name, etc. (Abstract) This policy is not domain policy but is, rather, a routing or a switching policy, an example of which being referred to in Rao as "call policy." <u>See</u>, e.g., Fig. 3, item 54, and column 8, line 58 - column 9, line 3; Fig. 12, and column 15, lines 34-45. Rao describes operation consistent with layer two (data link) and layer three (network) routing services in the ISO-OSI hierarchy (<u>see</u> column 2, line 13).

Issues:

(1) Is the policy disclosed in Rao which discloses operation of a network <u>switch,</u> the equivalent of Appellants' recited domain policy, or is it a switching policy?

(2) Is Lil properly combinable with Rao in the first place, where Lil discloses subject matter at <u>layers 6 and 7</u> in the ISO (International Standards Organization) OSI (Open Systems Interconnection) protocol while Rao discloses subject matter at <u>layers 2 and 3</u>?

(3) Where Lil shows application servers positioned both inside and outside of a PSTN, but where its disclosure is focused on and describes <u>only</u> the application server positioned <u>inside</u> the PSTN and where <u>only that inside-PSTN description is relied upon by the Examiner to map Lil to Appellants' claims</u>, is the rejection of Appellants' claims as being un-patentable over Lil (in view of Rao) proper, in view of the fact that the claims are all limited to an application server positioned <u>outside</u> the PSTN?

The outcome of this Appeal shall turn on how the Honorable Board decides these three issues. If any one of these issues is decided in Appellants' favor, then the claims are allowable and the Honorable Board should <u>REVERSE</u> the final rejection of the pending claims.

Detailed Argument:

I. RAO DISCLOSES A ROUTING OR SWITCHING POLICY AS EXEMPLIFIED BY ITS "CALL POLICY" BUT DOES NOT DISCLOSE "DOMAIN POLICY."

The final Office Action states that "Lil fails to teach explicitly domain policy. However, Rao teaches multi-service network switch with policy based routing. Rao teaches domain policy (column 8, line 58 to column 9, line 3)." (final Office Action, page 3). Appellants agree with part of this statement - Lil does not teach domain policy. In fact, the word "domain" does not appear even once in Lil. But, Appellants respectfully <u>disagree</u> that Rao teaches a multi-service network switch with <u>domain</u> policy based routing, for the following reasons. Rao states:

11

"FIG. 3 is an exemplary flow diagram for processing a connection request coming into the switch of FIG. 1. The program starts, and in step 50, the connection manager 46 detects an incoming call in one of the physical ports of the FM 10 (the receiving FM). In step 52, the connection manager 46 notifies the resource manager 38 in the receiving FM 10 of the incoming call. The resource manager 38, in step 54, searches a *call policy database* for a *call policy record* corresponding to the incoming call. The *call policy record* includes various parameters which dictate how the call is to be routed. *Different policies* may be applied based on the inlink of the call, a telephone number, *a domain name*, a source address, a destination address, and the like." (Rao, col. 8, line 58 - col. 9, line 3; Emphasis added.)

This section of Rao is relied-upon by the final Office Action (in combination with Lil) to reject independent claims 1, 8, 14, 19 and 24. Except for claim 14[1], each of Appellants' claims recites "domain policy," but this section does not disclose or suggest "domain policy" regardless of its use of both terms - "policy" and "domain". A careful reading of this section shows that a "call policy" is being discussed in the context of a "call policy database" and a "call policy record".

The other reference to "Different policies" in this section still means call policies, but one call policy being different from another call policy, and all being within the category of "call policy." In other words, "Different policies" is not a reference to a different-in-kind-policy, like domain policy. Indeed, the above-quoted language "Different policies may be applied..." really means different call [i.e., switching or routing] policies may be applied...." because there can be no other reasonable interpretation. Call policy, in Rao, has to do only with switching or routing and can be thought of as a switching policy or a routing policy, but not a domain policy. Domain policy has to do with the control of a domain, but that is not what is being controlled in Rao. In Rao, only the switching or routing path is being controlled. Outside of the vague reference to "different policies" the only "policy" discussed in this entire section of Rao is call policy.

In the last sentence in the above-quoted -section of Rao, a list of items is given upon which applied "different" policies may be based. This list includes: "inlink of the call, a

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[1] Claim 14 recites "authorization policy" rather than "domain policy" and is discussed later in this appeal brief.

telephone number, a **domain name**, a source address, a destination address, and the like."

(emphasis added). It is abundantly clear that the expression "domain name" is nothing more than

an identifier of a domain, just as the "telephone number" identifies the source or destination of a

telephone call, the "source address" identifies the address of a source, the "destination address"

identifies the address of a destination, etc. In general, a "domain <u>name</u>" (an identifier), by itself,

has nothing to do with domain <u>policy</u> which includes a set of rules applicable to members of that

domain for controlling that domain. In Rao, the domain name identifier is being used only as

one of several possible factors upon which to base its *call or switching or routing policy*. Any

reference in Rao to domain-based routing, or the like, means routing calls via particular routers

based on the domain, e.g., routing along a first path for a first domain and along a second path

for a second domain. This is not a disclosure of domain policy, but is a disclosure of routing or

switching policy based on the domain (i.e., the domain name).

The term "domain policy" does not appear in Rao and the separately used terms

"domain" used with "domain name" and "policy" used with "call policy" should not be mis-

construed together to allegedly suggest "domain policy." That is plainly wrong.

Call policy is discussed in Rao from column 13, line 65 to column 15, line 45 and is

<u>routing-path-selection limited</u>. Depending on the characteristics of a connection request such as

an inbound access channel or link, a calling or called telephone number, a domain name, a

source address, a destination address, etc., a router can be selected based solely on which of these

connection requests is involved. Indeed, in call-policy based routing, packets are forwarded to a

specific router based, for example, on a called telephone number. Thus, call policy based routing

defines a routing path within Rao's switch without the need to refer to a separate routing table.

(column 14, lines 1-12) Thus, Rao's <u>call policy is either synonymous with, or a subset of,</u>

<u>routing policy or switching policy</u>. The Rao switch maintains a call policy database that

13

determines how a dial-up connection is handled. Call policy parameters allow selection of

specific routers to which all user traffic should be directed. The call policy database is

preferably configured as a plurality of call policy records, each record defining a unique profile

for a set of users requiring system access.

From this description of call policy, it is clear that it is not a description of <u>Appellants'</u>

<u>"domain policy"</u> which is <u>policy applied by that domain's manager to calls mapped to that</u>

<u>particular domain</u>. Appellants' domain policies for a particular domain are rules which have

broad control over call activity in that particular domain, such as restricting subscriber access to

certain services. This is essentially different from mere routing-path selection. Referring to

Appellants' specification, examples of "domain policy" are provided:

> Associated with each domain is a domain manager 206, 208. Domain managers
> 206, 208 can apply **domain policies** to calls mapped to their domain by a domain
> mapper 210. These policies can restrict subscriber access to different services.
> For example, a domain manager 206, 208 may implement a policy that denies
> access to a service 204 for <u>subscribers that are behind in their payments</u>.
> (specification, ¶[0024], emphasis added)

In the above example, this domain policy can restrict certain services based on <u>payment</u>

<u>information</u>, e.g., can operate to deny access for subscribers who have not paid their phone bill.

> The domain manager 206, 208 associated with the subscriber's domain can apply
> its **domain policy** to the call, for example, to act as a "gatekeeper" by authorizing
> or denying access to a call service 204 provided by server 200. A domain
> manager 206, 208 policy may specify conditional logic (e.g., "IF" statements)
> expressed in Java or some other programming language and may access a wide
> variety of information to apply its policy. For example, a policy may have access
> to a subscriber's profile that stores a wide variety of <u>subscriber demographic and
> business related information</u>. (specification, ¶[0029], emphasis added)

In the above example, the rules of Appellants' domain policy can be applied to a call to authorize

or deny access to a particular service based on a subscriber's <u>demographic and business-related</u>

<u>information.</u> For that purpose, a subscriber profile can store all kinds of demographic and

business information related to subscribers, and Appellants' <u>domain policy</u> can allow access to

that information for that purpose. By comparison, Rao's "domain name", a mere identifier of a

domain, <u>cannot</u> access, or allow access to, such a subscriber profile. And Rao's "call policy"

that automatically routes calls to one router versus another based solely on whether it is routing

to, for example, a called telephone number versus a calling telephone number, or routing on the

basis of one domain name vs. another domain name, certainly cannot access such a profile - it

has absolutely nothing to do with application of Appellants' <u>domain policy</u>.

> FIG. 4 illustrates sample operation of application server 200. In the scenario of
> FIG. 4, application server 200 provides a subscriber with access to a service 204,
> here <u>voice-mail</u>. As shown, a subscriber uses a computer 214 to "dial" a phone
> number of a voice-mail messaging service provided by application server 200.
> Network 100 routes the call packets from computer 214 to softswitch 106
> associated with this phone number. Service provider interface 212 presents
> the originating phone number of the subscriber. In this example, by identifying
> the originating phone call as the phone number of a subscriber of subscriber
> domain #1, the domain manager 208 of domain #1 can apply the **domain policy**
> for subscriber domain #1 to the call. As shown, <u>domain manager 208 authorized
> access to voice-messaging service 204 sought by the caller.</u> (specification, ¶
> [0032], emphasis added)

In the above example, it is clear that domain policy can be applied to a domain by the domain

manager as needed- in this instance based on identification of the subscriber as belonging to

subscriber domain #1. The identification is a function of the subscriber's telephone number, and

the subscriber can be given access to voice mail. By contrast, Rao's domain name cannot be

applied to domains as needed - it merely identifies a domain.

> FIG. 8 illustrates operation of application server 200. Domain mapper 210
> initially maps a call from IP telephone 270 to subscriber domain 208. As shown,
> application of the **policy of subscriber domain** 208 results in a determination that
> the subscriber's call should be granted access to a particular service 282. This
> service 282 may reside within service domain #2. Thus, the corresponding
> service domain manager 264 **applies its policy to the call**. This policy may
> include, for example, logic that grants access to **subscribers of a particular
> domain (e.g., Verizon™ subscribers)** but not subscribers of **another domain
> (e.g., Sprint™ subscribers)**. Assuming application of the service policy permits
> access, service 282 handles the call. (specification, ¶[0037], emphasis added)

In this final example, Verizon subscribers can be in one domain and Sprint subscribers can be in a different domain, where application of a service domain manager's policy to the call demonstrates the granting of access to only one of the two company's subscribers.

Therefore, in view of the above various examples, it is submitted that Rao's "domain name" or "call policy" or an inappropriate combination of those terms, is not equivalent to Appellants' recited "domain policy."

Moreover, Rao's "domain-based routing" is not Applicant's "domain-<u>policy</u> based routing." In column 14, lines 12-17, Rao discusses domain-based routing which authenticates or identifies a user as belonging to a particular domain as a function of that user's login information. This is nothing more than the other domain references in Rao and discussed above. This "domain-based routing" does not disclose the "policy" of the domain, but merely routes packets from a particular user to a designated router based on that user's inclusion in a particular domain and, as such, is a routing policy or switching policy. This should be expected since Rao discloses a <u>switch.</u>

By contrast, Appellants' "domain-<u>policy</u> based routing" is completely different from Rao's "domain-based routing" because domain-policy based routing takes into consideration a wide variety of factors, and applies the rules of a particular domain policy to a particular user input, or subscriber input, in accordance with the operation of Appellants' invention as sketched-out above and as fully presented in its specification. Domain-policy includes the rule set which can be applied to that domain which, thereafter, can be the set of rules under which the domain operates until application of that domain policy is changed by the domain manager. Thus, Appellants' domain-<u>policy</u> based routing cannot be Rao's domain-based routing.

There is one additional distinction between Rao and Appellants' claim language to be made. Independent claim 14 uses the term "authorization policy" which is tied-into Appellants' "domain-policy." Appellants' specification states:

> As shown in FIG. 5, domain manager 208 can apply its policy to any event or condition involving a domain, not just in-coming calls. For example, FIG. 5 illustrates a service 204, <u>here a notification service, that automatically faxes a reminder letter to a subscriber's fax machine 224 at a specified time</u>. As shown, rather than receiving call information from softswitch 106, domain manager 208 receives call information from service 204. Again, based on call information, such as the destination fax telephone number, domain mapper 210 can select a particular domain involved by the call. In turn, domain manager 208 of selected subscriber domain #1 can **apply its domain policy to the call to determine whether service 204 can proceed**. As shown, after **<u>authorization,</u>** service 204 can initiate and control a call to subscriber's fax machine 224."

(Appellants' specification, ¶ 33) As disclosed above, <u>application of "domain policy"</u> is made to the call to determine if a fax notification service can proceed. If yes, the service is <u>authorized</u>. If not, the service is <u>not authorized</u>. Thus, "authorization policy", as recited in claim 14, results from application of, and/or is equivalent to, "domain policy."

In accordance with MPEP 2143, to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Appellants' disclosure. And, all three of these basic criteria must be met - if any one is not met the prima facie case of obviousness is not made.

17

In this instance, for reasons given below in Argument II there is no motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

Furthermore, for reasons given below in Argument II, there is no reasonable expectation of success if the references were combined.

Finally, for reasons given above, the prior art references, even if combinable (which they aren't), do not teach or suggest all of the claim limitations of independent claims 1, 8, 14, 19 and 24. Consider each independent claim, assuming, *arguendo*, combinability:

Claim 1 recites, interalia: "based on the information corresponding to the call, selecting a *domain policy*, the *domain policy* applying to a set of subscribers; and handling the call in accordance with the selected *domain policy*", emphasis added. Lil[2] and/or Rao for reasons given above, taken in any reasonable combination do not disclose or suggest domain policy, much less domain policy applying to a set of subscribers and, therefore, do not disclose or suggest at least these elements of claim 1.

Claim 8 recites, interalia: "defining a set of at least two domains, at least some of the domains having a *domain policy*; receiving information corresponding to a call at the application server outside the PSTN; *determining one or more domains* that apply to the call; and *applying policies associated with the determined domains* to the call", emphasis added. Lil and/or Rao for reasons given above, taken in any reasonable combination do not disclose or suggest domain policy, much less determining one or more domains that apply to a call nor applying policies associated with the determined domains and, therefore, do not disclose or suggest at least these elements of claim 8.

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[2] As noted earlier, the Examiner admits that Lil does not disclose domain policy and Appellants agree.

Claim 14 recites, interalia: "one or more aggregation domains, at least some of the domains having an associated *authorization policy*" (emphasis added). As discussed above, authorization policy, results from application of, and/or is equivalent to, "domain policy." Since Lil and/or Rao for reasons given above, taken in any reasonable combination, do not disclose or suggest domain policy, then those references cannot disclose or suggest authorization policy derived therefrom. For at least this reason, the combination of Lil and Rao does not disclose or suggest at least this element of claim 14.

Claim 19 recites, interalia, "define a set of more than one domains, at least some of the domains having a *domain policy*; receive information corresponding to a call received at the application server outside the PSTN; determine one or more domains that apply to the call; and *apply policies associated with the determined domains* to the call" (emphasis added). Lil and/or Rao for reasons given above, taken in any reasonable combination do not disclose or suggest domain policy, much less applying policies associated with the determined domains to the call. For at least this reason, the combination of Lil and Rao does not disclose or suggest at least these elements of claim 19.

Claim 24 recites, interalia, "selecting a *domain policy* for said each one of said calls, based on the information corresponding to said calls to obtain a selected domain policy for said each one of said calls, each said *selected domain policy applying to a set of subscribers* of one of said one or more telecommunications service providers; and *handling each of said calls in accordance with said selected domain policy*" (emphasis added). Lil and/or Rao for reasons given above, taken in any reasonable combination do not disclose or suggest domain policy, much less applying selected policy to a set of subscribers or handling each of the calls in accordance with that selected domain policy. For at least this reason, the combination of Lil and Rao does not disclose or suggest at least these elements of claim 24.

In view of the above, Lil and/or Rao, taken in any reasonable combination (even though they are not combinable in the first place), do not disclose or suggest independent claims 1, 8, 14, 19 and 24.

Accordingly, a prima facie case of obviousness has not been established. Appellants, therefore, respectfully request that the final rejection of these independent claims under 35 U.S.C §103(a) be <u>REVERSED</u> and the claims allowed.

Claims 2-7 are dependent from claim 1 and are allowable at least for reasons based on their dependency from an allowable base claim.

Claims 9-13 are dependent from claim 8 and are allowable at least for reasons based on their dependency from an allowable base claim.

Claims 15-18 are dependent from claim 14 and are allowable at least for reasons based on their dependency from an allowable base claim.

Claims 20-23 are dependent from claim 19 and are allowable at least for reasons based on their dependency from an allowable base claim.

Claims 25-31 are dependent from claim 24 and are allowable at least for reasons based on their dependency from an allowable base claim.

II. NO MOTIVATION TO BE DERIVED FROM LIL TO COMBINE LIL WITH RAO AND NO LIKELIHOOD OF THE COMBINATION OPERATING SUCCESSFULLY

On the one hand, Lil relates to apparatus and method for providing enhanced telecommunication services (title) to subscribers by <u>implementing an enhanced services platform</u> on a local network exchange within the public telephone network. On the other hand, Rao relates to a multi-service <u>network switch</u> with call policy based routing, the switch being capable of providing multiple network services from a single platform. Accordingly, Lil and Rao

provide solutions to inherently different problems and the services provided by Lil are quite

different from the services provided by Rao.

With respect to the ISO (International Standards Organization) OSI (Open Systems

Interconnection) networking protocol hierarchy, Lil's disclosure is directed to operation within

layer six (presentation) and layer seven (application) - call treatment services. But, by contrast,

Rao's switch disclosure is directed to operation within layer two (data link) and layer three

(network) routing services (Rao, col. 2, line 13). Accordingly, one of ordinary skill in the art in

reading Lil and seeking a solution to a missing domain policy in Lil, would <u>not</u> be motivated by

any disclosure in Lil, based on protocol layers six and seven, to seek that solution by searching in

Rao's switching disclosure based on protocol layers two and three and vice-versa.

Furthermore, there would not be a reasonable expectation or likelihood of success in

operation of a solution derived from such a combination of references because the protocol

layers in the references do not match each other, and any such combination would necessarily

result in a network protocol layer mismatch. Moreover, *arguendo*, even if the references were

combinable, which they aren't, the alleged "<u>domain policy</u>" suggested by the Examiner to be

taught by Rao is <u>non-existent</u> for reasons given above in Argument I.

Therefore, for this additional reason, the final rejection of all pending claims under 35

U.S.C. § 103(a) should be <u>REVERSED</u> and the claims allowed.

**III. PRIOR ART APPLICATION SERVER IN LIL RELIED UPON BY THE
EXAMINER TO SHOW A SERVER-LOCATION *OUTSIDE* A PSTN IS NOT
SUFFICIENTLY DISCLOSED IN LIL TO PROVIDE A BASIS UPON WHICH TO
REJECT APPELLANTS' CLAIMS WHERE EXAMINER READS DESCRIPTION OF
LIL'S *OTHER* SERVER LOCATED *INSIDE* THE PSTN ON APPELLANTS' CLAIMS**

Turning next to a completely different argument from that given above, all of Appellants'

claims call for an application server which is connected outside of a PSTN, but Lil shows the

application server which Examiner applies against Appellants' claims clearly within its PSTN

102. The Examiner disagreed: "...examiner respectfully disagrees. Lil discloses that

application server can be either within the PSTN or outside the PSTN (column 1, lines 59-62)."

(final Office Action, page 16) But, this cite is to Lil's prior art service platform about which no

detail is supplied.

> "The _traditional_ service platform 100 is shown positioned outside of the PTN 102
> due to the lack of flexibility in services traditionally provided by the PTN 102, as
> described above." (Lil, col. 1, lines 59-62, emphasis added).

This section of Lil is discussing its prior art and it is agreed that its prior art Fig. 1 does show _a_

traditional services platform outside of a PTN. Lil uses numerical designator "100" to identify

this traditional service platform but also uses the same "100" designator to identify the non-

traditional service platform positioned inside the PTN. In Appellants' opinion, this is at least

misleading and may be an error. In accordance with 37 C.F.R. §1.84(p)(4): "The same part of an

invention appearing in more than one view of the drawing must always be designated by the

same reference character, and the same reference character must never be used to designate

different parts." Indeed, using the same designator on both platforms suggests that both

platforms are identical - i.e., precisely the same, which is not feasible.

Appellants submit that a "traditional enhanced" platform configured or architected to be

positioned _outside_ a PTN cannot be identical in all respects to a "non-traditional enhanced"

platform configured or architected to be positioned _inside_ a PTN. There must be differences

between the two based at least on the different environments in which the two are operating - at

least the communication links between each platform and its environment are not identical when positioned inside or outside a PTN. For example, Fig. 2 shows a link between platform 100 and Service Transfer Point (STP) 120 within PTN 102 of Fig. 2, which is not needed/used and therefore not shown in prior art Fig. 1. And there can be other substantive operational differences within the platform itself, as well[3].

However, the Examiner is basing his rejection <u>solely</u> on an assumption or guess about the inner workings of the *traditional* platform located <u>outside</u> the PTN in Lil's Fig. 1, about which <u>no</u> information is supplied in Lil while, at the same time, is using Lil's written-description disclosure of a different *non-traditional* platform about which certain specifics are provided in Lil to read on Appellants' claims. Appellants submit that this is an improper application of art.

For example, on page 3 of the final Office Action, with reference to claim 1, it applies column 6, lines 16-21, 33-40 or 52-55, respectively, against the three elements of claim 1, but these sections of Lil are all describing Lil's Fig. 4. Fig. 4 relates back to Fig. 2: "With reference now to Fig. 4 of the drawings, there is illustrated in greater detail the service platform 100 shown in Fig. 2." (Lil, col. 5, line 66 - col. 6, line 1) Fig. 2, however, shows non-traditional platform 100 located inside PTN 102. <u>Thus, the applied sections of Lil to Appellants' claims disclose the</u> *non-traditional* <u>platform, but the depicted configuration relied upon by the final Office Action is</u> a *traditional* <u>platform. These are two different servers, despite the same misleading "100"</u> <u>designation, for reasons noted above.</u>

Therefore, because no detail (nothing more than a rectangular block) of the traditional platform located outside of a PSTN is disclosed, and because the Examiner applies sections of

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[3] For example, an IP based application server, such as that shown outside the PTN can have a richer set of domain policies than those associated with a PTN based server (inside the PTN). The IP based application server's domain policies are based on, or applied to, service domains where each such domain can have its own domain policy. This is one example of a major difference between an IP-environment-based server and a PTN-environment-based server. Regardless, there are no domain policies disclosed in Lil, as admitted by the Office Action.

Lil describing the functioning of its other application server located INSIDE the PSTN against

Appellants' claims, Appellants respectfully submit that Lil cannot be reasonably relied-upon to

disclose or suggest Appellants' claimed subject matter which is limited in <u>all pending claims</u> to

being <u>positioned outside of a PSTN</u>.

Therefore, for this additional reason, the final rejection of all pending claims under 35

U.S.C. § 103(a) should be <u>REVERSED</u> and the claims allowed.

CONCLUSION

For the reasons given above, Appellant respectfully requests that the Honorable Board reverse the final rejection of the pending claims.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 07-2347 and please credit any excess fees to such deposit account.

Verizon Corporate Services Group Inc.

By: _____

Joel Wall
Reg. No. 25,648

Verizon
Eden U.I. Stright
1515 Courthouse Road, Suite 500
Arlington, VA 22201-2909
Tel: 703.351.3586

CUSTOMER NO. 32127

VIII. CLAIMS APPENDIX

1.   A method of handling a call at an application server connected outside a public switched

telephone network (PSTN) and offering one or more services, the method comprising:

receiving information corresponding to said call at the application server outside the

PSTN, the information including data identifying a subscriber of said one or more of services

offered by the application server;

based on the information corresponding to the call, selecting a domain policy, the domain

policy applying to a set of subscribers; and

handling the call in accordance with the selected domain policy.

2.   The method of claim 1, wherein receiving information corresponding to a call comprises

receiving information from a softswitch.

3.   The method of claim 1, wherein the information including data identifying a subscriber

comprises at least one of the following: an origination phone number and a termination phone

number.

4.   The method of claim 1, wherein the domain policy comprises a policy encoded in a

programming language including conditional expressions.

5.   The method of claim 1, further comprising constructing a call model for the call.

6.   The method of claim 1, further comprising:

determining a service domain having a call service; and

applying the domain policy of the determined service domain to the call.

7.   The method of claim 1, wherein handling the call in accordance with the selected domain

policy comprises authorizing the call.

8.   A method of providing call services at an application server connected outside a public

switched telephone network (PSTN), the method comprising:

defining a set of at least two domains, at least some of the domains having a domain

policy;

receiving information corresponding to a call at the application server outside the PSTN;

determining one or more domains that apply to the call; and

applying policies associated with the determined domains to the call.

9.   The method of claim 8, wherein the domains comprise more than one subscriber domain.

10.   The method of claim 8, wherein the domains comprise more than one service domain.

11.   The method of claim 8, wherein the domains comprise more than one device domain.

12.   The method of claim 8, wherein the domains comprise more than one subscriber domain

and more than one service domain.

13.   The method of claim 8, wherein the policies comprise policies encoded in a computer

programming language including conditional expressions.

14.   An application server connected outside a public switched telephone network (PSTN),

comprising:

        one or more aggregation domains, at least some of the domains having an associated

authorization policy; and

        a domain mapper that identifies one or more domains based on call information received

by the application server outside the PSTN.

15.   The application server of claim 14, wherein the domains comprise subscriber domains.

16.   The application server of claim 15, wherein the domains comprise service domains.

17.   The application server of claim 15, further comprising a service provider interface for

handling call information received from a transport device.

18.   The application server of claim 17, wherein the transport device comprises a softswitch.

19.   A computer program product, disposed on a computer readable medium, for providing

call services at an application server connected outside a public switched telephone network

(PSTN), the computer program including instructions for causing a processor to:

        define a set of more than one domains, at least some of the domains having a domain

policy;

receive information corresponding to a call received at the application server outside the

PSTN;

determine one or more domains that apply to the call; and

apply policies associated with the determined domains to the call.

20.   The computer program of claim 19, wherein the domains comprise more than one

subscriber domain.

21.   The computer program of claim 19, wherein the domains comprise more than one

service domains.

22.   The computer program of claim 19, wherein the domains comprise more than one

subscriber domain and more than one service domain.

23.   The method of claim 19, wherein the policies comprise policies encoded in a computer

programming language including conditional expressions.

24.   A method of handling calls at an application server connected outside a public switched

telephone network (PSTN) and offering one or more call services to customers of one or more

telecommunications service providers, said method comprising:

receiving information corresponding to said calls at said application server outside the

PSTN, said information for each one of said calls including data identifying a subscriber of said

one or more telecommunications service providers and of one or more of said call services

offered by said application server;

selecting a domain policy for said each one of said calls, based on the information corresponding to said calls to obtain a selected domain policy for said each one of said calls, each said selected domain policy applying to a set of subscribers of one of said one or more telecommunications service providers; and

handling each of said calls in accordance with said selected domain policy.

25.   The method of claim 24, wherein receiving information corresponding to said calls comprises receiving information from a softswitch.

26.   The method of claim 24, wherein said information including data identifying a subscriber comprises at least one of the following: an origination phone number and a termination phone number.

27.   The method of claim 24, wherein said domain policy comprises a policy encoded in a programming language including conditional expressions.

28.   The method of claim 24, further comprising constructing a call model for said calls.

29.   The method of claim 24, further comprising:

determining a service domain having a call service; and

applying domain policy of said determined service domain to said calls.

30.   The method of claim 24, wherein said call services include voice-mail, call-forwarding, call-messaging, and 911 services.

31.   The method of claim 30, wherein said handling of said calls in accordance with said

selected domain policy includes authorizing or denying said subscribers access to one or more of

said call services.

IX. EVIDENCE APPENDIX

None.

X. RELATED PROCEEDINGS APPENDIX

None.